# Navigating cross-cultural research: methodological and ethical considerations

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**Abstract**

The intensifying pace of research based on cross-cultural studies in the social sciences necessitates a discussion of the unique challenges of multi-sited research. Given an increasing demand for social scientists to expand their data collection beyond WEIRD (western, educated, industrialized, rich, and democratic) populations, there is an urgent need for transdisciplinary conversations on the logistical, scientific, and ethical considerations inherent of this kind of scholarship. As a group of social scientists engaged in cross-cultural research in psychology and anthropology, we guide prospective cross-cultural researchers through some of the complex scientific and ethical challenges involved in this type of work. Such challenges involve (a) study site selection, (b) culturally appropriate research methods, and (c) community involvement. We aim to shed light on some of the difficult ethical quandaries inherent in of this type of high-profile research. Our recommendation emphasizes a community-centered approach, in which the desires of the community regarding research methodology, community involvement, results distribution, and data sharing are held in highest regard by the researchers.

## Introduction

The acknowledgement that most research in psychology and other social science fields is overwhelmingly based on so-called WEIRD (western, educated, industrialized, rich, and democratic) populations (*1*) has given way to intensified research funding, publication, and visibility of large-scale collaborative cross-cultural studies across the social sciences that expands the geographic range of study populations (e.g., *2-10*). However, the rapid increase in research outputs of this nature necessarily generates concerns regarding responsible methods and practice. In addition, many of the so-called "non-WEIRD" communities who participate in research are Indigenous, from low and middle income countries in the Global South, live in post-colonial contexts, and/or are marginalized within their political systems. This creates a need for transdisciplinary discussion on the importance of community participation and the explanation and sharing of research outputs with participants.

Given increasing pressure for social scientists to expand the range of societies from which they recruit participants to test hypotheses about human behavior, we convened a workshop to discuss the unique scientific and ethical challenges of research with non-western populations. As a group of investigators engaged in cross-cultural research projects in psychology and anthropology, our initial focus was on the challenges we face in collecting generalizable data, including data for comparative studies, either as the primary fieldworker or in collaboration with shorter term visitors. The increasing demand for standardized comparative measures from a diverse range of societies contributes to the intensity of these challenges. The growing need for more diverse study populations concerning topics in demography, health, wealth, cooperation, cognition, and belief systems raises unique scientific, logistical, and ethical issues, independent of discipline or research topic.

This paper adds to the growing dialogue on best practices when working with vulnerable, non-western populations (see *11-13*), and touches on topics that many social scientists, particularly cultural anthropologists, have been writing about for decades (*14-15*). Much cross-cultural research has historically been rooted in racist, capitalist ideas (*14*). Scholars have long debated whether research aiming to standardize cross-cultural measurements and analysis is tacitly engaged in colonial and imperialist practices (*16*) – and the degree to which this is still ongoing in 21$^{st}$ century cross-cultural research (*17*). Given this history, and the increasing rate at which large-scale comparative studies are being funded and published, it is critical that participating scientists inform themselves about these issues and be accountable to their participants and colleagues for their research practices. Field research, particularly with vulnerable populations, must be grounded in the recognition of the historical, political, sociological and cultural forces acting on the communities in question. These perspectives are often contrasted with "science"; here we argue that they are absolutely necessary as a foundation for the study of human behaviour. To that end, we eschew programmatic discourses on neocolonialistic social science practices, and focus instead on pragmatic scientific and ethical matters that can be implemented in the near future by social science researchers. We propose that careful scrutiny of (a) study site selection, (b) culturally appropriate research methods, and (c) community involvement, will begin to address some of these complex challenges. Our hope is that raising these issues will help researchers to better plan and execute their projects with appropriate consideration given to study communities and to collaborators.

## Study Site Selection

There are two major conceptual issues that should be considered as part of study site selection in cross-cultural research. First, the increased demand for data collected in non-western societies has

led to almost any study community outside of a WEIRD context being prized as a site for testing theories about the dynamics of human behaviour. This has led to the unprincipled inclusion of non-WEIRD populations in cross-cultural social science as if all non-western groups are interchangeable, and all equally different from the homogenous "west" (*18*). The irony is that this false "west versus the rest" binary continues to be reinforced by researchers who have heeded the call to expand study site selection beyond WEIRD societies. Rather, we argue that there should be clear *theoretical reasons* for inclusion for any study population that are based on knowledge of the relevant cultural context—WEIRD or not. Uncritical exoticism in the case of non-WEIRD populations is no less problematic than the uncritical assumption that what applies in the west applies to the rest.

Second, contemporary foraging communities continue to be discussed in the literature as close proxies of the societies of the ancestral past. While some of these groups may occupy areas that are ecologically similar to the environments in which early modern humans lived, and whose social systems may be informative for our understanding of aspects of ancestral modern human lifeways, these communities differ from early human communities in key ways. Many modern foragers have returned to hunting and gathering from a different mode of production (*19-20*), have opted into foraging versus other modes of production (*21*), and/or are currently residing in marginal environments that may not reflect their ancestral homelands (*22*). Furthermore, increased use of cash and integration with commercial markets impacts virtually all modern hunter-gatherers (*23,24*).

In short, when researchers round out their cross-cultural studies with a selection of "small-scale non-industrial" populations, we must be cognizant that their samples are drawn from an exceedingly small sub-set of human communities, and are potentially quite biased, with the result that inferences must be cautiously drawn. Again, this is the same principle that ought to apply to the selection of WEIRD samples; it is the diversity of samples and *match between theory and cultural context* that makes for improved research design (18).

To address these two conceptual issues it is imperative for researchers to problematize the exoticizing of particular peoples and cultures (*25)*. One way to do this is to take a theoretically motivated approach to sampling communities. This mitigates the chances that a study population is simply selected based on how generally "different" their lifeways seem compared to WEIRD samples and/or how often a particular population is researched and, thus, appears in publications and popular media outlets (i.e. how popular or iconic a particular study population is to researchers). To take a hypothetical example: imagine a scientist who wants to explain how children learn to share and cooperate, has already studied this in their local "western" university town, and wants to compare to a non-WEIRD site. To select an additional research site, they should not simply tick off the elements of the WEIRD acronym. Instead, they should ask how those WEIRD elements may shape important assumptions or variables of interest to theory about sharing and cooperation. They may then relate these theoretical factors to specific aspects of sociocultural context, and choose a site (or collaborator's site) that fits the corresponding research question. For sharing and cooperation, contextual variation might include: the nature of communal property, whether "fairness" is shaped by a sex and age hierarchy, the kinship relationships (or lack thereof) between participants, and the social mobility of participants (whether actors can change partners in cases of cheating/defection). These are just a few factors, for just one research topic, that are theoretically significant and *not* captured by a simple "west versus the rest" binary. Each researcher must walk through these steps for their topic, as part of site selection that goes beyond exoticism. In fact, researchers may find that they can conduct their research closer to home for some variables of interest. In this example,

researchers could recruit subpopulations within their own countries who, for example, vary in social mobility (e.g., short-term versus long-term residency in communities).

Intra-population sampling decisions are also important. Beyond the specifics of research design, it is important to note that cross-cultural research may also lend itself to unique ethical and social challenges. For example, foreign researchers (as sources of power, information, and resources) represent both opportunities for and threats to community members; these relationships are often complicated by power differentials due to unequal access to wealth, education, and historical legacies of colonization. As such, investigators must be alert to the possible bias among individuals who initially interact with researchers, to the potential negative consequences for those excluded, and to the (often unspoken) power dynamics between the researcher and their study participants (as well as among study participants). It is imperative that researchers attune themselves to internal dynamics that may inadvertently privilege some communities – or some contingents within communities – over others. In our collective experience, these dynamics can only be managed with a detailed and personal knowledge of participating populations, well-developed relationships with communities, sensitivity to local political dynamics, and cautious timelines. Accruing such knowledge takes time, which is not always well suited to the fast pace of current research, but is critical to having the ecological and cultural validity that is necessary for first-rate work.

## Research Design and Methods

Data collection methods largely stemming from WEIRD intellectual traditions are being exported to a range of cultural contexts. This is often done with insufficient consideration of the translatability (e.g. equivalence or applicability) or implementation of such concepts and methods in different contexts (*12;18*). It is critical that researchers translate the language, technological references, and stimuli as well as examine the underlying cultural context of the original method for assumptions that rely upon WEIRD epistemologies. Hypothetical questions and contrived methodologies can lack realism, but are often presented to participants with little experience of being tested on specific abstract problems in radically different cultural contexts, in the service of experimentally controlled methods (*26*).

The "trolley problem" is a good example, in which an ethical dilemma is used to identify variability in moral reasoning. Participants are asked to imagine a trolley car barrelling down railway tracks towards a group of people who are unaware and cannot leave the track. As an imagined bystander, the participant must decide whether to pull an imaginary lever to divert the trolley to a side track, thereby hitting one person who is also unaware and unable to move out of harms way, or to do nothing and allow the trolley to continue on its original track, killing multiple people (*27*). Using this problem to test hypotheses about moral reasoning in diverse cultural settings is extremely complex, not least because the contrived premise may not be relevant or meaningful in the particular social context. Responses to the experimental task may not reflect the same moral economy or conceptualizations of harm that make this scenario an ethical dilemma in the societies in which it originated. While the presentation of the research question can be, to some extent, standardized or tailored to the context, it is unclear whether participants in different societies *are answering the same question* (see *28* for a good example of how this was done successfully in an Indigenous community in Nicaragua).

In another example, a developmental study conducted by Broesch and colleagues (*29*) transported a simple and straightforward task to examine the development and variability of the timing of self-

recognition in children in seven societies. Typically this milestone is measured by surreptitiously placing a mark on a child's forehead and allowing them to discover their reflective image and the mark in a mirror. While this developmental milestone typically manifests in children by the age of 18 months, the authors found that only 2 out of 82 children (aged 1-6 years) "passed" the test by removing the mark using the reflected image. Their results are unexplained by existing developmental theories. The authors' interpretation of these results is that performance reflects false negatives and instead measures implicit compliance to the authority figure who placed the mark on the child. This raises the possibility that the mirror test may lack construct validity in cross-cultural contexts – in other words, that it may not measure what it was designed to measure.

An understanding of cultural norms may ensure that experimental protocols and interview questions are culturally and linguistically salient. This can be achieved by implementing several complementary strategies. A first step is to collaborate with members of the study community to check the relevance of the instruments being used. Incorporating perspectives from the study community from the outset can reduce the likelihood of making scientific errors in measurement and inference (*18; 30-31*).

An additional approach is to use mixed methods in data collection, such that each method "checks" the data collected by the other methods. A mixed-method approach can incorporate a variety of methods such as participant observation, semi-structured interviews, and experiments. For example, in their study on mate choice among the Himba pastoralists of Namibia, Scelza and Prall (*32*) first employed semi-structured discussion groups and informal conversations with study participants. After better understanding the way Himba themselves express desired characteristics of formal and informal partners, the researchers incorporated these characteristics into a ranking task (see also *33*).

The use of participant observation and/or qualitative interviews is essential for determining the appropriate linguistic terms and categories used to elicit survey data and conduct experiments. For example, in a study of contraceptive use in rural Poland (*34*), participants argued that the standard distinction between "modern" and "traditional" contraceptives inaccurately categorized their contraceptive practices. Their answers to standard contraceptive questions differed when a dichotomy between natural and artificial was used, which reduced underreporting of specific contraceptive practices such as withdrawal, sympto-thermal, and calendar methods because they were no longer presented as 'old-fashioned'. Asking participants to talk aloud (*35*) as they complete a task or asking follow-up (debriefing) questions at the end of the experiment may allow researchers to better understand the decision-making processes at play (see the post-game interviews of *36*).

## Community Involvement

Too often researchers engage in "extractive" research, whereby a researcher selects a study community, and collects the data that is required to exclusively further their own scientific and/or professional goals. This model may work in a university lab setting where participants typically have little to gain or lose beyond participation compensation and time lost. However, extractive methods situated within community contexts may not only lead to methodological challenges, but also alienate participants from the scientific process. Many researchers are, by way of their identities, associated with formerly colonial, racist, and sexist institutions and governments. As mentioned above, much cross-cultural research is carried out in former or contemporary colonies—often where the researcher's natal language is spoken as a colonial one. Explicit and implicit power differentials create ethical challenges that must be acknowledged by researchers and incorporated into study design. To provide examples of how to do this, we draw on cultural anthropology and development

studies frameworks of participatory research, grounded theory, and collaborative research (*37*). What these frameworks hold in common, and what we reiterate here, is that it is critical that communities be included in study design, implementation, and presentation of research/return of results. There is no one-size-fits-all approach, yet a productive baseline may be for researchers to consider community inclusion as part of their project design from the start.

Including research participants at the outset, when research questions are being formulated, raises additional challenges and takes time. Many participating communities live in remote areas in which field research is logistically challenging. Where establishing a long-term collaboration is not an aim, researchers should seek collaborators with site-specific ethnographic experience (*13*). Experienced field researchers often can help their collaborators formulate culturally salient and locally important research questions, and can facilitate conversations with community stakeholders. It must be borne in mind that this imposes significant costs of time and energy on the part of long-term field researchers, who bear the risks as well as the benefits. A topic that warrants its own discussion, and one that our collective group will be addressing a forthcoming piece.

Researchers can also work to include participants in the study design to varying degrees. For example, in a population genetic study on the early population history of Vanuatu (*38*), one of the authors (HC) tried different approaches to explaining the purpose of the research project. At a broad level, an analogy with linguistic family trees was most salient for discussion of population history and emerged naturally from conversations with communities about whether to carry out the research in the first place. Describing the DNA itself was far more challenging and was only possible by including the community in all stages of the project. Another coauthor (ANC), provided feedback on temporal changes in food and water insecurity in a foraging population in Tanzania using a different strategy: she enlisted community members as data collectors, whose feedback on interview questions were incorporated in order to ensure that the concepts being queried were understood by participants (*39*).

Some projects and/or methods may not lend themselves to this type of community inclusion. If that is the case, researchers can include research participants at all levels of planning in other ways, such as compensation. The form of compensation, and who receives it, should be discussed with the community prior to beginning a project. Context-specific knowledge of social structure and sharing economy can help a researcher to identify the most effective and appropriate means of direct compensation.

Context-specific knowledge can also be useful when planning informed consent. Most informed consent procedures were developed within the medical research community, with strict criteria for inclusion and high standards of linguistic comprehension expected. For people whose only experience of signing a formal agreement involves legal, political, or medical implications, standard consent forms can be intimidating. For communities where consent is community-based rather than individual, a broader approach to the consent process must be sought. Consent is also often thought to be a one-time transaction, usually at the beginning of an experiment or interview. However, this is not an appropriate fit for communities where formal legal obligations carry less currency than do reciprocal social relationships. This means that consent should be seen as a process, also referred to as “dynamic consent”, not merely the collection of names and signatures (*40-42*).

A new suite of challenges emerges once data collection has ended. There are ethical issues regarding the return of research results and associated data to the community. It is important that researchers discuss this issue with participants as part of the consent process and respect the desires of the

community in this regard. It is often good form for researchers to provides ample time for participants to query and discuss results; moreover, collaborative discussions with the community (or private discussions with interested respondents) potentially challenge or deepen the researchers' interpretations of the data. Ideally, such community discussions provide the researcher with novel insights into data interpretation, while providing participants with a satisfactory understanding of the knowledge generated by the research, and an opportunity to engage with the researchers' motivations for carrying out the study. It is also important for researchers to consider how communities might benefit from access to they data they provide, and how local capacity to use such data can be built up as part of the research study.

By having conversations with participating communities about how they would like data returned, researchers and participants may find solutions for data sharing that are meaningful to community members – often through the production of archival works. In one study examining child development in Vanuatu, one of the co-authors (TB) worked with local cultural interest groups to identify a meaningful way to share data. Together they decided to move beyond scientific communication and to share video data as a way of maintaining cultural information – giving access to other local social scientists and interested individuals. This entails ownership and can be achieved relatively easily with an investment in finding a solution. When considering data sharing, researchers should bear in mind that some types of data-storage facilities (computers, libraries) may not exist, or may not be accessible to their participants. One strategy used independently by two of the authors (HC and JAB) is to provide SD cards to participants with project-related video, photo, and audio materials stored on them and which can be used in mobile phones. This allows information to be either kept secret, or to be shared widely. At community member's request, co-author ACP and two collaborators, one a local leader and another an anthropologist, collected video footage of the production of handicrafts and uploaded these to the internet, where community members felt that they (and future generations) would have better access to the footage. Ultimately, we suggest a participant-led approach rather than top-down in making these decisions. Another option used by one of the authors (MBM) is to link research to the facilitation of workshops for the writing and publication of a collectively-sourced cultural history of a highly marginalized ethnic group, making the books freely available to local schools (*43*). In short, making these decisions requires two-way dialogue with participants to arrive at a reasonable solution based on their preferences.

Data sharing may also include shifting ownership of research outputs to the participants in a more explicit manner. For example, after much advocacy, there is now a federal government mandate that all research conducted within Indigenous communities in Canada remains the property of the participating community(s) (*43*). Researchers could pursue a similar model in their own work. For some types of data (e.g. open access data sharing) this may include carefully anonymizing results in order to protect individual or community identities. Researchers need to consider the ethics of publishing information from study communities alongside the requirements of funding agencies and ethical review boards, as well as the priorities of open science. We suggest that the research be designed (and budgeted) to allow time to return to the study communities to present and discuss the results and these issues, if possible prior to publication.

After all study design, implementation, and data analysis are complete and results are returned to the participants, the work is not over. Far too often, little attention is paid to the politics of representation when disseminating research results more widely, especially in online forums (including social media). We must all take responsibility for the language used to describe results, whether language we use ourselves or language used by press officers or journalists as well as the use of photographs, videos, audio recordings, material culture, and artifacts in our research and public outreach efforts.

The use of these materials should be addressed in the process of informed consent (see discussion above). Sensationalizing or exoticizing images or language can not only demean study communities but can also undo years of careful community-based work. These practices are not only unethical because they may represent participants inappropriately, but also because they can affect the relationships between communities and the long-term field researchers. It is essential for all researchers to bear these issues in mind when disseminating their research in web- and public-spaces, lectures, media, and publications.

## Conclusion

Our aim here is to add to the growing dialogue on best practices in social science research, particularly as they relate to cross-cultural studies that involve research participants from Indigenous communities. As research funding and publication of cross-cultural studies continues to expand across the social sciences, it is necessary to acknowledge the unique methodological and ethical challenges of this research. As scholars from a wide range of disciplines increasingly engage in such research with little or no formal training or experience working with such communities, special consideration of (a) study site selection, (b) local implementation of research design and methods, and (c) community involvement is essential. Our aim is not to discourage researchers from embarking on cross-cultural studies, but rather to alert them to the multi-dimensional considerations at play, ranging from study design to participant inclusion, and to encourage constructive exchange with trained and experienced field researchers. It not only remains unethical to turn a blind eye to some of the challenges that we have highlighted, but may result in poor scholarship. Transdisciplinary dialogue on principles and practices can be useful not only for researchers, but also for funding agencies and reviewers evaluating 21$^{st}$ century cross-cultural and multi-site research. More broadly, addressing these challenges is an important step towards a decolonized comparative social science.

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